

near the surf. Nests were found in the thickest shrubs, that were probably of the present race, proving that they are resident.

As specimens in fresh fall plumage were needed for comparison with the Lower California birds I forwarded a skin to Mr. R. Ridgway who writes me: "A specimen of the same sex of *H. lecontei* from the Mojave River, California, has a shorter wing and *very much* longer tail than your bird."

A comparison of my peninsula birds with a small and unsatisfactory series of typical *H. lecontei* before me, shows the latter to have a slightly longer tail (average), though the wing and other measurements are the same. An immature specimen from the collection of Mr. F. Stephens, taken fifteen miles inland from Point Lobos, Sonora, Mexico, Aug. 19, 1884, is just assuming the fall plumage, which is considerably paler than my Lower California specimens, though darker than any true *lecontei* I have examined.

A PRELIMINARY LIST OF THE BIRDS OF OKANOGAN COUNTY, WASHINGTON.

BY WILLIAM LEON DAWSON.

ANY list of the birds of this region would be unintelligible without a brief survey of the topography and physical conditions. Okanogan County, with an area almost equal to that of the State of New Jersey (being slightly under 7000 square miles), is pre-eminently a mountain county. The only really level spots in it are the narrow terraces, or benches, which mark former high levels of the Columbia and Okanogan Rivers, with their tributaries. The rest is mountains, low and grass-clad, with scattering pines along the north bank of the Columbia River, which bounds the county on the south; higher and well-timbered in the eastern and central portions; high and rugged in the extreme, with abounding glaciers, in the western part. The drainage is effected principally by five rivers: Wenatchee, Entiat, Chelan, Methow,

and Okanogan, all flowing south-east or south into the Columbia, whose high water mark here is only 600 feet above the ocean. Of these rivers, all but the Okanogan occupy narrow mountain valleys unimportant for migration. The Okanogan River, however, coming from far up in British America, and flowing due south, is a very old stream and has worn out a comparatively broad valley, a mile or so in width, along which there is a considerable movement of birds.

Of the lakes, Chelan is the most remarkable, occupying as it does, through a stretch of seventy miles, a narrow mountain fissure, varying in width from one-half to three miles. This body of water, together with the short, rapid river which drains it, furnishes a winter retreat for the hardier water-fowls, although its precipitous shores offer small inducement to the Limicolæ. Other lakes and water-filled kettle-holes abound, especially in *coulées*, — narrow, rocky defiles once scored out by glaciers. At the lower level these are often alkaline, and little frequented except by Coots and Grebes; but the mountain lakes are of the purest, and attract the Loons and Golden-eyes, while even the water-filled cirques in the highest ranges are sometimes tenanted by alpine forms.

The vegetation of the lower hills and benches, comprises bunch-grass, sage-brush, and scattering pines, while every brook or spring is eagerly surrounded by dense growths of willow, birch, poplar, syringa (*Philadelphus gordonianus*), and wild-rose. As one leaves the semi-arid foothills, and goes up Lake Chelan, and climbs the western ranges, the vegetation becomes very luxuriant, partaking largely of the character of the Puget Sound flora, and so on up to the limit of the trees. One might thus divide the county rudely into two avifaunal regions: the semi-arid, or lower levels, and the mountains proper, or higher ranges. The first division would include all well sunned river valleys, benches, rolling hills, and upland prairies, from 600 feet elevation on the Columbia to the 3500 found in some such districts as those which flank the Okanogan and Methow Rivers. The higher ranges comprise the wilder portions of the west and north, including deep, heavily wooded valleys, whose mean elevation may not really equal certain highland prairies of the semi-arid portion,

but whose faunal character is strictly determined by the enclosing mountains. Thus, Meadowlarks, in a semi-arid district of scattering pines in the center of the county, reach an elevation of 3500 feet, whereas they are not to be found in the Stehekin Valley which opens westward from the head of Lake Chelan at an altitude of only 970 feet. Again *Dendroica auduboni* and *Sitta canadensis*, which are strictly subalpine forms, range down to the water's edge at Graham Harbor—midway on Lake Chelan—whereas we should look for them in vain at twice the elevation on the hills at the foot of the lake.

A residence of fourteen months in this county, June, 1895 to August, 1896, with headquarters at Chelan, a small town at the foot of Lake Chelan, gave me a fair opportunity to study the bird life of the region, and especially since my business required me to travel over 2000 miles on horse back, to all parts except the extensive Indian reservation on the east side of the Okanogan River. In the summer of 1895 and again in 1896, trips were made to the high ranges west of Lake Chelan, Wright's Peak (alt. 9310 feet) being the objective point on both occasions, so that the list of mountain birds is fairly inclusive.

Gulls sometimes visit the lake, but the species were not learned. It is almost certain that many stragglers and rarer residents, notably Buteos and Limicolæ, are unrecorded. Okanogan County is important as representing practically the northern limit of Upper Sonoran forms, and as being the southernmost debatable ground between Pacific Slope and Rocky Mountain trinomials. How much it is affected by Puget Sound 'saturated' forms, it is at present impossible to determine, but there is here a large field for the study of transition forms.

Even such a brief survey would be incomplete without mention of the characteristically mild winter climate of this region. This is, of course, effected by the influence of the Japan Stream, so that the temperature seldom falls to zero in the lower valleys. The warm winds are, moreover, deprived of their superabundant moisture by the western mountains, so that they pass eastward warm and dry. This fact tempts many birds to winter about Chelan, who in any other longitude of their range would have to pass hundreds of miles further south to find as mild a tempera-

ture. During the winter of 1895-96, I recorded 40 species of winter residents near Chelan alone. Below I have recorded in the main list only the results of personal observations, but a few birds, not positively identified, or whose presence is strongly suspected, seemed to make necessary the addition of a small hypothetical list.

1. *Æchmophorus occidentalis*. WESTERN GREBE. — Two females were seen on Lake Chelan on May 11, and six males on the Columbia River on May 19, 1896. The harsh call note of the two sexes is very different.

2. *Colymbus holboellii*. HOLBELL'S GREBE. — A familiar bird in every rush-lined pond; easily distinguishable in the breeding season by its gay colors. A set of two eggs was taken June 4, on Wapato Lake, in two and a half feet of water.

3. *Colymbus auritus*. HORNED GREBE. — One bird was seen which spent the winter on the Chelan River.

4. *Urinator imber*. LOON. — Every considerable lake boasts a pair of these birds.

5. *Pelecanus erythrorhynchos*. AMERICAN WHITE PELICAN. — A specimen preserved at Lakeside was secured from a flock on Lake Chelan about five years ago.

6. *Merganser americanus*. AMERICAN MERGANSER. — Found on Lake Chelan, where they breed sparingly.

7. *Merganser serrator*. RED-BREASTED MERGANSER. — Common at Chelan, where they are found throughout the year. These birds frequent the wildest rivers, notably the Methow, and their ability to shoot the rapids while under water is amazing.

8. *Anas boschas*. MALLARD. — Everywhere the commonest of the Anatinae. It was found at Chelan in December, but probably did not remain during the actual freeze-up.

9. *Anas americana*. BALDPATE. — One flock seen and two specimens secured on Lake Chelan.

10. *Anas carolinensis*. GREEN-WINGED TEAL. — Common up to Dec. 30.

11. *Anas cyanoptera*. CINNAMON TEAL. — Two flocks were seen late in the spring near Lake Chelan.

12. *Aythya marila nearctica*. AMERICAN SCAUP DUCK. — These Ducks, with the four following, regularly winter at Chelan. They spend the nights on the lake, which almost never freezes over, but because the water of the lake is so clear and deep, they pass down early in the morning to feed in the river through the day, if unmolested. The river itself is swift except in a few places, and furnishes little vegetable matter and no shell-fish. This species sometimes flocks with the Golden-eye, and mingles regularly, in winter, with the next.

13. *Aythya affinis*. LESSER SCAUP DUCK. — Occurrence and habits as above.

14. *Clangula clangula americana*. AMERICAN GOLDEN-EYE.—The Whistlers are the characteristic Ducks of this mountain county. This species is not so common as the next, the proportion being perhaps one to three.

15. *Clangula islandica*. BARROW'S GOLDEN-EYE.—Every considerable mountain pool is visited by a pair or more of these birds during the breeding season. In winter they keep to the open lakes and rivers without passing south. Surely there can be no sound more thrilling to the gunner's ear than the clear whistling of this bird's wings, and especially if a pair produce now a single tone and now an ever changing syncopation.

16. *Charitonetta albeola*. BUFFLE-HEAD.—Common, but of more sparing distribution than the two preceding.

17. *Oidemia deglandi*. WHITE-WINGED SCOTER.—Found on Wapato Lake, a small body of water near Lake Chelan, during December.

18. *Branta canadensis occidentalis*. WHITE-CHEEKED GOOSE.—Distributed sparingly throughout the county, where it breeds, especially in the Okanogan Valley. Flocks of two or three hundred are said to have wintered at Wapato's but they did not remain this year during snow-fall.

19. *Rallus virginianus*. VIRGINIA RAIL.—Not common; breeds.

20. *Porzana carolina*. SORA.—Not common; breeds.

21. *Fulica americana*. AMERICAN COOT.—The inevitable accompaniment of 'cat-tails'. In passing along the road through Toat's Coulée, one may see the Coots sitting on their nests, or cackling at play in any of the numerous water-filled kettle-holes.

22. *Phalaropus lobatus*. NORTHERN PHALAROPE.—One specimen was secured on Wapato Lake during the migrations.

23. *Gallinago delicata*. WILSON'S SNIPE.—Only one bird was seen,—at Wapato's.

24. *Tringa minutilla*. LEAST SANDPIPER.—A flock of three was seen at the lower end of Wapato Lake, during the migrations.

25. *Totanus solitarius cinnamomeus*. WESTERN SOLITARY SANDPIPER.—Seen about large streams, notably at Stehekin, at the head of Lake Chelan, where it regularly breeds.

26. *Numenius longirostris*. LONG-BILLED CURLEW.—Not uncommon during migrations, but there is little land suitable for them. A few bred in the open country about Wapato's, while one pair on the Okanogan, chose a nesting site near the stage road, where their incessant querulous cries were poured out against every passer-by.

27. *Ægialitis vocifera*. KILLDEER.—A few were seen in early spring at Wapato's, but it is doubtful whether they lingered.

28. *Dendragapus obscurus fuliginosus*. SOOTY GROUSE.—The spring bird of the lower foothills. They appear to move down from their winter home in the fir-trees of the higher slopes, during the last week in March. At this time, and indeed until after the breeding season, they are quite

unwary. When the young are nearly full grown, the flock begins to retire slowly up the mountain side until the middle of fall, when they are to be found only on the higher ridges. Those, however, whose winter home is on the highest western ranges do not seem to have so much latitude of movement. On August 5 I encountered a brood of full grown young on Wright's Peak, at an altitude of 7000 feet.

29. *Dendragapus franklinii*. FRANKLIN'S GROUSE.—Not nearly so common a bird as the last. It does not apparently range so low as the Sooty Grouse in any given section where both are found; nor on the contrary, I suspect, is it to be found about the higher peaks. On the 28th of April, 1896, I found a nest of this bird at an altitude of about a thousand feet above Lake Chelan. The bird was a close sitter, and her seven eggs were unusually large: 1.98 by 1.83 and 1.94 by 1.35, being the measurements of two average eggs of the set.

30. *Bonasa umbellus togata*. CANADIAN RUFFED GROUSE.—The differentiation of the subspecies of the Ruffed Grouse is not at all clear in this region. In any case the range and habit of the local species is nearly like that of the eastern bird, inasmuch as it frequents copses, springs, and river-bottoms at low altitudes.

31. *Lagopus leucurus*. WHITE-TAILED PTARMIGAN.—This species is reported as not uncommon in the higher altitude. I met with them once on the barren summit of Wright's Peak, at an elevation of about 9000 feet. So far from deserving the name of 'fool hens', applied to them in the winter season, when they may be readily approached, these Ptarmigan in August were excessively afraid and absolutely unapproachable, although it is certain they had never seen a human being before.

32. *Pediocætes phasianellus columbianus*. COLUMBIAN SHARP-TAILED GROUSE.—The common bird in open situations, which yet afford copses and cover,—an invariable accompaniment of stubble-fields, and an habitué of grain-stacks. In portions of the county they are still very abundant, but where hunted they soon become extremely wary.

33. *Zenaidura macroura*. MOURNING DOVE.—Not at all common. Only one nest was found during my stay.

34. *Cathartes aura*. TURKEY VULTURE.—A scattering few are to be found, but it is doubtful whether the county boasts a score.

35. *Circus hudsonius*. MARSH HAWK.—Perhaps a dozen individuals seen.

36. *Accipiter velox*. SHARP-SHINNED HAWK. Several individuals noted.

37. *Buteo borealis calurus*. WESTERN RED-TAIL.—Based on a single specimen, preserved by Ralph Metcalf, near Silver. The Buteos are rare in Okanogan County, but must be common on the Big Bend Plateau, just across the Columbia River.

38. *Archibuteo lagopus sancti-johannis*. AMERICAN ROUGH-LEGGED HAWK.—Only one individual of this cumbrous Hawk was noted.

39. *Archibuteo ferrugineus*. FERRUGINOUS ROUGH-LEG.—Several pairs seen. I found a nest near Chelan, which was occupied by two fresh

eggs on the 10th of April. It was placed 60 feet high on a knob projecting from the face of a perpendicular cliff. The birds were arrant cowards and offered no remonstrance while their nest was being pillaged.

40. *Aquila chrysaëtos*. GOLDEN EAGLE.—Fairly common throughout the county. This Eagle is a familiar feature of our wildest mountain scenery, and is especially likely to turn up after one has killed a mountain goat. One pair breeds within 200 yards of a farmhouse near the Okanogan River.

41. *Haliaeetus leucocephalus*. BALD EAGLE.—Comparatively rare. Only three or four individuals were noted during my stay.

42. *Falco mexicanus*. PRAIRIE FALCON.—Next to the Sparrow Hawk, the commonest Raptor. One coulée in particular, which connected two large terrace tops or flats along the Columbia River, and whose walls were beetling cliffs towering a thousand feet high, sheltered half a dozen pairs of these Falcons. The favorite breeding site is some inaccessible niche in a perpendicular rock-wall, which faces some open situation. Except in places where they congregate for sport, the presence of these birds is likely to go unsuspected, until the screaming of the falconets betrays the nesting site.

43. *Falco columbarius*. PIGEON HAWK.—One specimen shot. Probably not uncommon. The relation of this bird to Richardson's Merlin was not satisfactorily determined.

44. *Falco sparverius deserticolus*. DESERT SPARROW HAWK.—Abundant on the lower foothills and in open situations. Less common in the mountains.

45. *Pandion haliaëtus carolinensis*. AMERICAN OSPREY.—Common along the Columbia River and tributary streams.

46. *Asio wilsonianus*. AMERICAN LONG-EARED OWL.—Two or three pairs will be found in any considerable swamp. Eggs were taken in April and in June.

47. *Bubo virginianus saturatus*. WESTERN HORNED OWL.—These birds were seen only at the upper end of Lake Chelan.

48. *Speotyto cunicularia hypogæa*. BURROWING OWL.—Not a characteristic bird, but still to be occasionally met with in the semi-arid and treeless portions at lower levels.

49. *Ceryle alcyon*. BELTED KINGFISHER.—Not a common bird, except on Lake Chelan where it winters.

50. *Dryobates villosus harrisi*. HARRIS'S WOODPECKER.—Not common.

51. *Dryobates pubescens homorus*. BATCHELDER'S WOODPECKER.—Materials are not at hand for the stricter determination of this subspecies. The bird is fairly common.

52. *Xenopicus albolarvatus*. WHITE-HEADED WOODPECKER.—This bird was seen only twice. The last time it was found nesting at an altitude of 3000 feet. There appears to be nothing unusual about its nesting habits, except that in this instance the eggs were all dotted with pitch,

which was probably derived from the chips at the bottom of the nest. The pitch spots were distributed with tolerable uniformity, and had become black through contact with foreign matter.

53. *Sphyrapicus ruber*. RED-BREASTED SAPSUCKER.—One specimen was shot from a fir tree on the shore of the lake.

54. *Ceophloeus pileatus*. PILEATED WOODPECKER.—Not common. Perhaps a half dozen individuals were seen.

55. *Melanerpes torquatus*. LEWIS'S WOODPECKER.—The 'Black' Woodpecker is one of the most characteristic birds of the region. It is, however, pretty closely confined to the lower levels. Every considerable dead tree in the coulées, or along the river banks, is bound to have furnished at one time or another a home for these birds.

56. *Colaptes cafer*. RED-SHAFTED FLICKER.—Common. The careless rancher still calls it 'Yellow-Hammer'.

57. *Phalænoptilus nuttallii*. POOR-WILL.—One specimen secured. This bird seems to take its insect prey on or close to the ground. It is confined to semi-arid regions in valleys and 'draws'.

58. *Chordeiles virginianus henryi*. WESTERN NIGHTHAWK.—Found sparingly in open situations.

59. *Cypseloides niger borealis*. BLACK SWIFT.—These erratic and almost uncanny creatures appeared at Chelan several times during the summer of 1895. They would come in a straggling flock at about 7 o'clock in the morning, hawking at insects as they went, but all coming from up the lake and moving eastward. I saw them only once this year, on June 9. On this occasion I saw a company of a score hunting leisurely at high noon, over the Okanogan River. In the evening of the same day a hundred or so gathered after the manner of Chimney Swifts, to gyrate in social fashion, at a point on the Columbia River, 20 miles south from the first ones observed.

60. *Chætura vauxii*. VAUX'S SWIFT. The only point in the county where these birds were noted, was at the head of Lake Chelan, where they regularly nested and roosted in the hollow limbs of dead balm trees.

61. *Aëronautes melanoleucus*. WHITE-THROATED SWIFT.—A single specimen seen while exploring the cliffs of the Columbia River gorge, seems referable to this species. It was probably a wanderer from some detached colony, recently emigrated to this northern limit of the semi-arid region.

62. *Trochilus alexandri*. BLACK-CHINNED HUMMINGBIRD.—By no means a common bird. Only two glimpses were afforded me of this nimble fay, but my conclusions are confirmed by other observers.

63. *Selasphorus rufus*. RUFOUS HUMMINGBIRD.—Abundant. In certain mountain glades, where fire-weeds abound, these Hummers fairly swarm. They were continually observed in the vicinity of the glacier on Wright's Peak, at an altitude of 8000 feet. In their search for sweets they seem to be attracted by color rather than by odor, for they repeatedly examined a bright check blanket, which a member of our party had, and seemed greatly disappointed that it did not prove to be a flower bed.

64. *Tyrannus tyrannus*. KINGBIRD.—Not nearly so common as *T. verticalis*, but of general distribution along the terraces and lake borders.

65. *Tyrannus verticalis*. ARKANSAS KINGBIRD.—Abundant. You may expect to find a vociferous pair nesting among the out-buildings of any farm-yard. At Chelan some large fir trees along the river front contained several nests apiece.

66. *Sayornis saya*. SAY'S PHŒBE.—This bird is the frequent associate of the Prairie Falcon, preferring to haunt just such cliffs as the nobler bird selects for nesting sites. Here it takes up its station about the middle of March, and it is rarely to be found at any considerable distance from home.

67. *Contopus borealis*. OLIVE-SIDED FLYCATCHER.—Not a common resident even in the higher ranges where it is found, but conspicuous on account of its clear, penetrating note,—*sweé-chew, sweé-chew*, delivered with great energy from a high branch in some fir tree.

68. *Contopus richardsonii*. WESTERN WOOD PEWEE.—This bird is perhaps the most conspicuous species of the fir-clad, precipitous shores of Lake Chelan, for with scarcely an interval along the shore line, its lugubrious notes can always be heard. The breeding range, so far as observed, is confined to the lake shore, where the birds choose some exposed situation, and set a dainty, hempen cup at the fork or foot of a bare limb, preferably of a sapling. Fresh eggs were found as late as July 28.

69. *Empidonax difficilis*. WESTERN FLYCATCHER.—The western Empidonaces are all at home on Lake Chelan. This species was noted only at Graham's Harbor, where it breeds, but it doubtless occurs in suitable localities throughout the county. Note a soft, sibilant, *pis'-wit*.

70. *Empidonax traillii*. TRAILL'S FLYCATCHER.—Abundant in the lower mountain-valleys and coulées. It is the commonest of the Empidonaces wherever found, and was recorded up to 1700 feet. One of its common notes is *pisó*.

71. *Empidonax hammondi*. HAMMOND'S FLYCATCHER.—Rare. Found chiefly about isolated springs where it is likely to be the only member of the genus present. Its note is a brisk *sewíck, sewíck*, and at rarer intervals, *switch-oo*, or *sweékhoo*,—the latter harsh and unresonant, and so easily distinguished from the penetrating note of the Olive-sided Flycatcher.

72. *Empidonax wrightii*. WRIGHT'S FLYCATCHER.—Several specimens secured on Lake Chelan. It was found breeding at Graham Harbor and near Stehekin. Note a soft, liquid *swit*. This record extends the northern range of the species.

73. *Otocoris alpestris leucolæma*. PALLID HORNED LARK.—One individual wintered near Chelan. Easily distinguishable from

74. *Otocoris alpestris merrilli*. DUSKY HORNED LARK.—Found sparingly on the lower bunch grass hills. About 20 individuals were

seen on the Okanogan Flats during the spring migration, but they probably went further north.

75. *Pica pica hudsonica*. AMERICAN MAGPIE. — Abundant. Confined in spring to the coulées and springs, where they breed indifferently in willows and thorn-apples, or the highest pines. In the fall I have found these garrulous free-booters in the mountains at an altitude of 7000 feet. No other birds can thrive where the Magpies flourish, for their annual destruction of eggs and young is simply incalculable.

76. *Cyanocitta stelleri annectens*. BLACK-HEADED JAY. — Not common but of general distribution throughout the county.

77. *Corvus americanus*. AMERICAN CROW. — This bird does not seem to have been subjected to the persecutions which have made life a burden to its eastern brethren, and the result is that it is making a marked increase in numbers. Its cause for continued confidence is further witnessed by the fact that it still seeks low willow saplings for nesting sites.

78. *Nucifraga columbiana*. CLARKE'S NUTCRACKER. — A conspicuous bird of the pine forests, except during the early breeding season, when it is retiring, and cunningly silent.

79. *Molothrus ater*. COWBIRD. — Rare. Only two specimens were seen.

80. *Agelaius phoeniceus*. RED-WINGED BLACKBIRD. — Found sparingly in the few suitable localities.

81. *Sturnella magna neglecta*. WESTERN MEADOWLARK. — Everywhere abundant on the lower levels, and found breeding up to 3000 feet.

82. *Icterus bullocki*. BULLOCK'S ORIOLE. — The counterpart of the eastern Baltimore Oriole in habits and general economy. Found commonly where balm trees abound, and by river sides.

83. *Scolecophagus cyanocephalus*. BREWER'S BLACKBIRD. — Sparingly found about the lower end of Lake Chelan and in settled valleys.

84. *Carpodacus cassinii*. CASSIN'S PURPLE FINCH. — Seen only along Lake Chelan. A flock of them regularly visited the yard of the little hotel at Stehekin for crumbs.

85. *Loxia curvirostra minor*. AMERICAN CROSSBILL. — A small troop was seen at Stehekin in the summer of 1895.

86. *Leucosticte tephrocotis littoralis*. HEPBURN'S LEUCOSTICTE. — A pair of this rare species were found feeding full-grown young on the moraines just below the glacier of Wright's Peak, at an altitude of 8000 feet. North and west of this station there is an immense area of glacier flanked peaks, where the birds are sure to find a congenial summer home.

87. *Acanthis linaria*. REDPOLL. — Present in thousands during the early winter migrations. Many remain through the season.

88. *Spinus tristis*. AMERICAN GOLDFINCH. — Several large flocks were seen in December, but they are rare in the summer.

89. *Spinus pinus*. PINE SISKIN. — The ubiquitous bird of the higher ranges. In the summer they were plentiful at Stehekin, with an elevation of only 970 feet, and not less common near the mountain summits.

90. *Plectrophenax nivalis*. SNOWFLAKE. — Of irregular occurrence in winter. They are of course confined to the benches and little prairies. A few lingered till March 17.

91. *Poocætes gramineus confinis*. WESTERN VESPER SPARROW. — Not a common species. It is found sparingly in the artemesia of hill-sides.

92. *Ammodramus bairdii*. BAIRD'S SPARROW. — Observed in small numbers at Chelan, during both the spring and fall migrations.

93. *Chondestes grammacus strigatus*. WESTERN LARK SPARROW. — A characteristic bird of the sage-covered flats, and the Columbia Valley sands.

94. *Zonotrichia leucophrys intermedia*. INTERMEDIATE SPARROW. — Of this bird my note book of May 14, 1896, says, "The Intermediate Sparrow is by all odds the commonest bird in Okanogan County, at the present writing. The number I have seen today in a thirty mile ride, probably exceeds that of all other birds combined. They are of almost universal distribution, but fairly swarm in wayside coppices." Notwithstanding this abundance, I have no record of any which stayed to breed.

95. *Zonotrichia coronata*. GOLDEN-CROWNED SPARROW. — A few individuals were noted during migrations.

96. *Spizella socialis arizonæ*. WESTERN CHIPPING SPARROW. — The monotonous trill of this lowly sage-bird is a tireless feature of any considerable stretch of open country. Most of the species are born in the sage, live, sing, mate, and die in the sage.

97. *Spizella breweri*. BREWER'S SPARROW. — An obscure Spizellan was caught attempting improvements on the familiar Chipping Sparrow ditty, and was instantly shot on suspicion. It was the only individual noted.

98. *Junco hyemalis oregonus*. OREGON JUNCO. — Like Mr. Rhoads, I prefer to set this Junco down as *oregonus*. It is common at low levels in the winter, but retreats up the mountains as warm weather approaches.

99. *Melospiza fasciata guttata*. RUSTY SONG SPARROW. — Not common. Restricted entirely to swamps, and brush patches along streams.

100. *Pipilo maculatus arcticus*. ARCTIC TOWHEE. — A specimen obtained Feb. 24, 1896, undoubtedly belongs to this subspecies. Through an oversight I failed to determine the standing of the resident bird, which may prove to be either *arcticus* or *megalonyx*.

101. *Habia melanocephala*. BLACK-HEADED GROSBEEK. — Only one individual was seen, in the brush of a spring draw.

102. *Passerina amœna*. LAZULI BUNTING. — These dainty bits of azure are gratifyingly common throughout the county. Any secluded brush patch or overgrown 'slashing' is sure to harbor a pair of them.

103. *Piranga ludoviciana*. LOUISIANA TANAGER. — The 'Louisiana' Tanager is one of the commonest birds in the timber. In spite of its brilliant colors, so well does it harmonize with the evergreen foliage, that its presence would generally go unsuspected, were it not for its tell-tale *pittic*, or *pittic*.

104. *Petrochelidon lunifrons*. CLIFF SWALLOW.—Only two colonies were found; one, of unmistakable immigrants, was taking possession of a barn near the mouth of the Methow River; the other, consisting of some 400 individuals, might have been occupying the cliffs in the Columbia gorge for several seasons.

105. *Chelidon erythrogastra*. BARN SWALLOW.—Rare. Found only in a cave at the head of Lake Chelan, and in a barn at Malott.

106. *Tachycineta bicolor*. TREE SWALLOW.—Rare. Seen only during migrations.

107. *Tachycineta thalassina*. VIOLET-GREEN SWALLOW.—Abundant in the mountains.

108. *Clivicola riparia*. BANK SWALLOW.—One colony in Chelan comprises 400 individuals.

109. *Ampelis garrulus*. BOHEMIAN WAXWING.—Several flocks of these beautiful birds were seen during the winter of 1895-96.

110. *Ampelis cedrorum*. CEDAR WAX-WING.—Okanogan County is a famous place for cherries and therefore for 'cherry birds.'

111. *Lanius borealis*. NORTHERN SHRIKE.—Several seen during the spring movement.

112. *Lanius ludovicianus excubitorides*. WHITE-RUMPED SHRIKE.—Not infrequent. Breeds.

113. *Vireo gilvus*. WARBLING VIREO.—The resiant genius of birch groves; common.

114. *Vireo solitarius cassinii*. CASSIN'S VIREO.—Perhaps less common than *gilvus*, but having the same general range.

115. *Helminthophila celata lutescens*. LUTESCENT WARBLER.—Not rare. A troop of them were heard singing gaily, while the snow of a belated storm was melting on one of the upland benches.

116. *Dendroica æstiva*. YELLOW WARBLER.—Common, but not abundant except at the foot of Lake Chelan.

117. *Dendroica auduboni*. AUDUBON'S WARBLER.—This trim little Warbler is to be found, not too plentifully, anywhere in the mountains. There seems to be no vertical limit to its range. I encountered these birds on Wright's Peak at an elevation of 8000 feet.

118. *Dendroica occidentalis*. HERMIT WARBLER.—A single specimen was secured in the dense fir forest on Pershall Creek at an elevation of 5000 feet.

119. *Geothlypis macgillivrayi*. MACGILLIVRAY'S WARBLER.—A not uncommon resident in underbrush and tangles. One song heard reminded me strongly of that of a Dickcissel, though, of course, lighter and much less penetrating, *sheep, sheep, sheep, shear, shear, sheep*; or *sheep, sheep, sheep, sheep, shear, sheep*.

120. *Geothlypis trichas occidentalis*. WESTERN YELLOW-THROAT.—Found sparingly in certain swamps and river bayous.

121. *Icteria virens longicauda*. LONG-TAILED CHAT.—This brilliant minstrel was first found piping to the solitary cliffs, which line the

Okanogan River on the north. A few scattering individuals were later noted on the Methow River.

122. *Sylvania pusilla pileolata*. PILEOLATED WARBLER.—A few individuals seen. The bird is likely to escape notice on account of its skulking habits.

123. *Setophaga ruticilla*. AMERICAN REDSTART.—Noted at two points: Silver and Methow City. At the latter place a pair were feeding their young in an alder grove below town.

124. *Anthus pensilvanicus*. AMERICAN PIPIT.—Comes straggling through the county in myriad swarms, during October and November. The spring movement is more rapid and compact.

125. *Cinclus mexicanus*. AMERICAN DIPPER.—Found throughout the length of every mountain stream. In winter many establish themselves along the Chelan River, which is always open, and seem to have among themselves quite well defined beats or stations, which they respect through the season.

126. *Galeoscoptes carolinensis*. CATBIRD.—A rare bird,—found only at the head and foot of Lake Chelan. Only two birds were seen, but a friend, Mr. Chas. Robinson, reports two nests from the foot of the lake.

127. *Salpinctes obsoletus*. ROCK WREN.—Common about all cliff and rock slides of the lightly timbered sections.

128. *Troglodytes aëdon aztecus*. WESTERN HOUSE WREN.—Observed only once, in the central part of the county, where it had built a nest over the door of a rancher's 'shack.'

129. *Troglodytes hiemalis pacificus*. WESTERN WINTER WREN.—Resident in the higher mountains.

130. *Sitta carolinensis aculeata*. SLENDER-BILLED NUTHATCH.—Not common throughout the county, but almost invariably associated with *Sitta pygmæa*.

131. *Sitta canadensis*. RED-BREASTED NUTHATCH.—Fairly common during migrations. Also breeds in the higher mountains.

132. *Sitta pygmæa*. PYGMY NUTHATCH.—Abundant in the regions of scattering pines. Except during the breeding season, they are always found collected in groups of from ten to one hundred. In these alliances, offensive and defensive, they usually include a pair or so of Slender-bills, who vary the monotony of their gentle sibilations by an occasional sharp *quank*.

133. *Parus atricapillus occidentalis*. OREGON CHICKADEE.—Common.

134. *Parus gambeli*. MOUNTAIN CHICKADEE.—Common. Its local range does not seem to be separable from that of *P. a. occidentalis*.

135. *Regulus satrapa olivaceus*. WESTERN GOLDEN-CROWNED KINGLET.—Fairly common. Found in summer in the highest mountains.

136. *Regulus calendula*. RUBY-CROWNED KINGLET.—Fairly common. To hear the dainty rollick of this happy elf is to forget the blues.

137. *Myadestes townsendii*. TOWNSEND'S SOLITAIRE.—Noted several times in midsummer in very diverse situations. Whenever seen it has maintained an imperturbable silence.

138. *Turdus ustulatus*. RUSSET-BACKED THRUSH.—Of uniform distribution in all wooded hollows.

139. *Turdus aonalaschkæ*. DWARF HERMIT THRUSH.—A single pair was found in a dense fir forest on a north slope, at an elevation of 4250 feet.

140. *Merula migratoria propinqua*. WESTERN ROBIN.—Common, but nowhere abundant.

141. *Hesperocichla nævia*. VARIED THRUSH.—A single straggler was seen skulking in the low thorn bushes, which line the foot of the lake, in early spring. It was, however, seen once again in midsummer in the higher ranges, where it undoubtedly breeds.

142. *Sialia mexicana occidentalis*. WESTERN BLUEBIRD.—Of irregular occurrence. Ten birds, in a compact bunch, were sighted on the 9th of March, and along through the middle of March numerous individuals were seen mingling freely with *Sialia arctica*. A group of ten were seen again on May 1, but no more were noted during the season.

143. *Sialia arctica*. MOUNTAIN BLUEBIRD.—These exquisites, in their quadruple-extract-of-azure garb, are justly ranked the topmost twig of the American ornithological tree. They pass at their leisure through Chelan and up the Columbia and Okanogan Rivers, in great flocks in the spring, while a scattering few remain to breed.

The following is a brief list of birds imperfectly identified or admitted on inconclusive evidence.

HYPOTHETICAL LIST.

1. *Larus occidentalis*. WESTERN GULL.—One of the Gulls seen on Lake Chelan probably belongs to this species. I believe it might have been found breeding, sparingly, four or five years ago.

2. *Larus philadelphia*. BONAPARTE'S GULL.—Either this bird or *L. franklinii* appeared several times on Lake Chelan during Dec., 1895.

3. *Olor buccinator*. TRUMPETER SWAN.—A pair seen at Wapato's in the spring of 1896 could not with certainty be distinguished from *O. columbianus*. They are said to be not uncommon.

4. *Grus mexicana*. SANDHILL CRANE.—Cranes are abundant during migrations, and are said to breed in the northern part of the county, in the 'lime belt'. I had no opportunity to determine the species. Several years ago an army of crickets invaded the country about Chelan, and immediately large flocks of Cranes appeared, who at once devoted themselves to ridding the land of the pests. The Cranes are said to have passed south following the march of the crickets.

5. *Totanus melanoleucus*. GREATER YELLOW-LEGS.—One bird believed to be of this species was seen flying high over the Chelan River.

6. *Centrocercus urophasianus*. SAGE GROUSE.—I have it on the authority of Mr. G. M. Adams, of Virginia City, that 'Sage Hens' were formerly found on the north bank of the Columbia River near his place.

But since they are such large birds, and find so little of their favorite sage-brush cover, it is doubtful whether any remain in the county at present.

7. *Coccyzus americanus occidentalis*. CALIFORNIA CUCKOO. — Unmistakable Cuckoo notes were twice heard, but the birds were not discovered.

8. *Corvus corax sinuatus*. AMERICAN RAVEN. — Some strange croaks heard and a brief glimpse obtained at Hallowe'en Basin (elevation 6500 feet) entitle this bird to a place on the list of suspects.

9. *Helminthophila ruficapilla gutturalis*. CALAVERAS WARBLER. — A troop of Warblers seen in the spring migration seems referable to this species.

10. *Dendroica nigrescens*. BLACK-THROATED GRAY WARBLER. — I believe I heard a song of this bird above Graham Harbor on Lake Chelan.

DESCRIPTION OF A NEW PINE GROSBEAK FROM CALIFORNIA.

BY WILLIAM W. PRICE.

Pinicola enucleator californica, new subspecies. CALIFORNIA PINE GROSBEAK.

General characters. — "Very similar to *P. e. kodiaka*, but differs in the very much narrower bill, and the less extensive red in the plumage."¹ It differs from *P. e. canadensis* in the much larger, more hooked and less turgid bill, and in the almost entire absence of dark centers to the feathers on the back and scapulars. The difference in size and shape of the bill is as distinct as the difference between *Carpodacus purpureus* and *C. cassinii*.

Type, ♂ ad. (No. 3429, Museum Leland Stanford, Jr., University; Pyramid Peak, near Echo Post Office, El Dorado Co., California, altitude about 7500 feet, July 18, 1896; collected by W. W. Price and C. S. Dole). General color light vermilion varying on head to intense vermilion, slightly tinged with yellowish and madder-pink, and changing to ash gray on scapulars, flanks, belly and under tail-coverts. The plumage is everywhere of this color beneath the surface, giving a general appearance of

¹ Mr. Robert Ridgway in letter, to whom a series of the California *Pinicola* was sent for determination.